

Title (en)

SELF-CLEANING CO2-REDUCTION SYSTEM AND RELATED METHODS

Title (de)

SELBSTREINIGENDES CO2-REDUKTIONSSYSTEM UND ZUGEHÖRIGE VERFAHREN

Title (fr)

SYSTÈME DE RÉDUCTION DU CO2 AUTO-NETTOYAGE ET PROCÉDÉS ASSOCIÉS

Publication

EP 4274921 A1 20231115 (EN)

Application

EP 22700744 A 20220110

Priority

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- US 202163200513 P 20210311
- LU 102697 A 20210325
- EP 2022050323 W 20220110

Abstract (en)

[origin: WO2022148856A1] A self-cleaning CO2 reduction strategy is proposed herein including alternating operation and regeneration of the CO2 electrolysis system. The strategy includes application of short and periodic reductions in applied voltage, thereby avoiding saturation and prevention of carbonate salt formation.

IPC 8 full level

C25B 1/23 (2021.01); **C25B 3/26** (2021.01); **C25B 9/15** (2021.01); **C25B 9/19** (2021.01); **C25B 11/052** (2021.01); **C25B 11/057** (2021.01); **C25B 11/065** (2021.01); **C25B 11/075** (2021.01); **C25B 11/081** (2021.01); **C25B 15/029** (2021.01); **C25B 15/08** (2006.01)

CPC (source: EP US)

C25B 1/23 (2021.01 - EP); **C25B 3/26** (2021.01 - EP US); **C25B 9/15** (2021.01 - EP); **C25B 9/19** (2021.01 - EP); **C25B 9/23** (2021.01 - US); **C25B 11/032** (2021.01 - US); **C25B 11/052** (2021.01 - EP); **C25B 11/057** (2021.01 - EP); **C25B 11/065** (2021.01 - EP); **C25B 11/075** (2021.01 - EP); **C25B 11/081** (2021.01 - EP); **C25B 15/02** (2013.01 - US); **C25B 15/029** (2021.01 - EP US); **C25B 15/085** (2021.01 - EP); **C25B 11/052** (2021.01 - US); **C25B 11/065** (2021.01 - US); **C25B 11/081** (2021.01 - US); **C25B 15/031** (2021.01 - US)

Designated contracting state (EPC)

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EP 2022050323 W 20220110; CA 3203665 A 20220110; EP 22700744 A 20220110; US 202218271561 A 20220110